## IN THE CLAIMS

Claims 1-5 (canceled).

- 6. (Previously amended) The method of claim 38, wherein a human hematopoeitc cell composition enriched in human T-cells is cultured.
- 7. (Previously amended) The method of claim 38, wherein the culture medium is continuously perfused at a ramped rate proportional to the lactate concentration and/or cell density to replace the culture medium without substantial dilution of the cell density.
- 8. (Previously amended) The method of claim 38, wherein the culture medium is replaced at rate of from 50% to 100% daily replacement for a cell density of from  $1x10^4$  to  $1x10^7$  cells per ml of culture.

Claim 9. (Canceled).

- 10. (Previously amended) The method of claim 38, wherein the cells are cultured for at least 2 days.
- 11. (Previously amended) The method of claim 38, wherein the culture medium contains at least 1 growth factor which stimulates the proliferation of the cells.
- 12. (Previously amended) The method of claim 38, wherein the cultured lineage committed human cells have enhanced replicative potential.

(Claims 13-37 (canceled)

38. (Currently amended) A method for obtaining lineage committed human cells with enhanced biological function comprising culturing a lineage committed human hematopoietic cell composition cells under physiologically acceptable liquid culture conditions, said conditions including replacement of a liquid culture medium at a rate of at least 25% daily replacement continuously for more than on day and for a time sufficient to

obtain human lineage committed <u>hematopoietic</u> cells with enhanced biological function, wherein said enhanced biological function is relative to the biological function of the lineage committed human <u>hematopoietic</u> cells that are cultured in a static culture; and wherein the lineage committed human cells are <u>differentiated</u> to at least a point where they are <u>programmed</u> to develop into a specific type of cell more differentiated than human stem and <u>progenitor cells</u>.

- 39. (Original) The method of claim 38, wherein the biological function enhanced in the cultured cells comprises at least one member selected from the group consisting of secretion of substances, cell-cell communication, receptor expression on the cell surface, cytolysis, antigen presentation, antigen processing, ability to home *in vivo* to sites for function, and the ability to proliferate leading to development/regeneration of tissue similar to naturally occurring structure/function.
- 40. (Currently Amended) The method of claim 38, wherein the biological function enhanced in the isolated lineage committed human <u>hematopoietic</u> cells comprises increased release of cytokines.
- 41. (Currently Amended) The method of claim 38, wherein the biological function enhanced in the isolated lineage committed human <u>hematopoietic</u> cells comprises increased cytolytic activity.
- 42. (Previously Amended) The method of claim 38, wherein the human lineage committed <u>hematopoietic cell composition cells further</u> comprise <del>hematopoietic cells,</del> mesenchymal cells, keratinocytes, fibroblasts, hepatocytes, neural cells, epithelial cells, lymphocytes, osteoblasts or human osteoclasts.

Claim 43. (Canceled)

- 44. (Currently Amended) The method of claim 38, wherein the human lineage committed <a href="hematopoietic cell composition comprises">hematopoietic cell composition comprises</a> [cells comprise] dendritic cells or non-myeloid mature cells which are other than stromal cells.
- 45. (Currently Amended) The method of claim 38, wherein the human lineage committed hematopoietic cell composition comprises [cells comprise] T-cells, dendritic cells or chondrocytes.

( Claims 47 and 48. (Canceled)